

# INTERNATIONAL SEARCH REPORT

Inte al application No.  
**PCT/SE03/00329**

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: **17-32**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**see next sheet\***
2.  Claims Nos.: **1-32**  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
**see next sheet\*\***
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

\*

Claims 17-32 relate to methods of treatment of the human or animal body by therapy (Rule 39.1 (iv)): Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds.

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Claims 1, 3-10, 13-17, 19-26, 19-32 relate to a large number of possible vascular diseases and states of tissue hypoperfusion with hypoxic or ischemic consequences for which support within the meaning of Article 5 and 6 PCT is lacking. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those disclosed in claims 2, 11 and 12, 18 and 27-28.

Claims 1-4, 11-20, 27-32, relate in respect of the wording "...peptides derivable from human lactoferrin and/or natural metabolites of human lactoferrin and/or functionally equivalent analogues of human apo-lactoferrin..." to a large number of possible compounds for which support within the meaning of Article 5 and 6 PCT is lacking. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely to human lactoferrin, apolactoferrin and the variants disclosed in the dependent claims.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A61K 38/40, A61P 9/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, CHEM. ABS DATA, MEDLINE, EMBASE, BIOSIS, DERWENT BIOTECHNOLOGY ABS.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 199, no. 602, 29 February 1996 (1996-02-29) & JP 72 78011 A (MORINAGA MILK IND CO LTD), 24 October 1995 (1995-10-24) abstract --	1,3-11, 13-17,19-27, 29-32
A	WO 0001730 A1 (SCIENCE INVEST AB), 13 January 2000 (13.01.00) --	1-32
X	STN International, File CAPLUS, CAPLUS accession no. 1997:501617, Document no. 127:210350, Morinaga Milk Industry Co., Ltd.: "Novel angiogenic disease-treating agents containing lactoferrins or their hydrolyzates"; & JP,A2,09194388, 19970729 --	1,3,17,19

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

27 May 2003

03-06-2003

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Dialog Information Services, File 155, MEDLINE, Dialog accession no. 09882254, Document no. 98321919, Shimura S et al: "Reoxygenation injury in a cultured corneal epithelial cell line protected by the uptake of lactoferrin"; & Investigative ophthalmology & visual science (UNITED STATES) Jul 1998, 39 (8) p1346-51 --	1,3-10, 13-17,19-26, 29-32
A	WO 9833509 A2 (PHARMING B.V.), 6 August 1998 (06.08.98), page 6, line 31; page 18, line 3 --	1-32
A	DATABASE WPI Week 200204 Derwent Publications Ltd., London, GB; Class B04, AN 1998-586148 & JP 2001527406T T (BIOCEM SA), 25 December 2001 (2001-12-25) abstract --	1-32
A	Dialog Information Services, File 34, SciSearch (R), Dialog accession no. 05539219, Nakajima M et al: "Lactoferrin as a suppressor of cell migration of gastrointestinal cell lines"; Journal of cellular physiology, 1997, V170, N2 (FEB), P101-105 --	12,28
A	WO 0012541 A2 (ALPHARMA AS), 9 March 2000 (09.03.00), page 35, third paragraph -----	12,28